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REC'D 29 JUN 2004  
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I, JULIE BILLINGSLEY, TEAM LEADER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. 2003902888 for a patent by SCOTT BENTON as filed on 10 June 2003.

WITNESS my hand this  
Twenty-first day of June 2004

JULIE BILLINGSLEY  
TEAM LEADER EXAMINATION  
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Regulation 3.2

**AUSTRALIA**

**Patents Act 1990**

**PROVISIONAL SPECIFICATION**

APPLICANT: SCOTT BENTON  
NUMBER:  
FILING DATE:

Invention Title: BRACED TIMBER TRUSSES

The invention is described in the following statement:-

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## **BRACED TIMBER TRUSSES**

### **Technical area**

This invention relates to the area of building construction and in particular to the area of the use of parallel chorded trusses such as are commonly used for supporting floors and internal walls and the like.

### **Background to the Invention**

It is well known for parallel chorded trusses to be used as long span floor joists among other applications. These generally comprise wooden horizontal members separated and connected by cross-bracing multi toothed nail plate connector members.

The advantage of such trusses is that they provide good access between the cross members for facilities such as plumbing, electrical services and air conditioning ducts and the like. A disadvantage however is in the quality of the wood required as for long spans it may be necessary to use hard woods which are quite costly when compared with soft woods and laminates which are used in other truss type members.

The alternative is to use laminated plywoods as the wooden horizontal members. In this application the horizontal members are grooved on their inner faces to accept a

longitudinal sheet of wooden material, preferably some relatively inexpensive fibreboard or the like, which passes between them to provide the requisite strength to the truss assembly.

Clearly use of the latter type of truss prohibits the possibility of cabling or any other services being able to pass through the truss. Although this type of truss is less expensive than that previously described its limitations are clear.

#### **Outline of the Invention**

It is an object of this invention to provide a stable support means in the form of a parallel chord truss which substantially overcomes the difficulties produced by the use of either of the previously described trusses.

The invention is a parallel chord truss which includes elongate lateral chord members in fixed engagement with a penetrable separating member, the lateral chord members having cross bracing means which permits access to the penetrable member.

It is preferred that the lateral chord members be manufactured from a wood laminate such as plywood. It is further preferred that the penetrable separating member be a particle board elongate sheet in sleeved engagement with each chord member.

While it is preferred that the separation member be of a material such as a particle or fibre board, which is sufficiently strong and easy to cut, it is within the scope of the invention that any appropriate material could be used.

Additionally any appropriate cross bracing material could be used however it is preferred that diagonal cross basing members be used of the type that are multi toothed nail plate connectors and are nailed to each chord member.

In order that the invention may be more readily understood we will describe by way of non limiting example a specific embodiment of the invention.

In one embodiment of the invention a chord truss is provided in which the longitudinal chord members are manufactured from a plywood laminate material.

The interior faces of the chord members are grooved to accept a spacing sheet of wood particle board or fibreboard which is able to be cut with a hole saw or the like to permit other materials such as ducting and electrical cabling to pass through the truss.

Such excision of apertures in the truss would as a general rule significantly reduce the overall strength of the truss however the truss of the invention is provided with

bracing members passing between the chords in the form of diagonally oriented multi toothed nail plate connectors which connect between opposing chords.

In this preferred embodiment of the invention diagonal supports are used to maximise the strength of the truss however the precise orientation of the bracing members is not limiting in the invention.

Basically the invention lies in the provision of cross bracing members between opposing chords of a chord truss such that access is provided to the wooden panel separating the chords to permit the creation of apertures in the wood wherever these may be required for any particular given application.

By this means a relatively inexpensive chord truss manufactured preferably from laminated wood may be strengthened sufficiently for access means through the truss to be provided for the passage of other materials.

It is envisaged that apertures having a diameter of up to 90% of the width of the chord separating panel could be bored in the panel while retaining the requisite strength of an unbraced truss of that type.

Whilst I have described herein a specific embodiment of the invention it is envisaged that other embodiments of the invention will exhibit any number of and any combination of the features previously described and it is to be understood that

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**variations and modifications in this can be made without departing from the spirit and  
scope thereof.**

**DATED THIS 10<sup>th</sup> DAY OF JUNE 2003**

**Scott Benton  
By his Patent Attorneys  
A. TATLOCK & ASSOCIATES**